

MINUTES OF THE SIXTEENTH MEETING OF THE PUBLIC SAFETY NATIONAL COORDINATION COMMITTEE

Date/Time: Friday, May 31, 2002; Meeting commenced at 9:30 a.m.

Address: Federal Communications Commission
Commission Meeting Room
445 – 12th Street, S.W.
Washington, D.C. 20554

Attendees: See attached list

Convening of Meeting. Michael Wilhelm, Designated Federal Officer for the National Coordination Committee (“NCC”), called to order the sixteenth meeting of the NCC. He explained that Kathleen Wallman, NCC Chairperson, was ill and could not attend the meeting.

Presentation by Steve Proctor. Steve Proctor, NCC Steering Committee Member and Executive Director of the Utah Central Area Network, was introduced by Mr. Wilhelm. Mr. Proctor gave a PowerPoint presentation on implementation of the public safety communication system at the Winter Olympics in Salt Lake City, Utah. He mentioned challenges that everyone could relate to in building the radio system over the past ten years and used at the Olympics: turf issues, funding, what technology to use, type of coverage desired, what happens if users don’t help support the system, staffing, input of agencies, maintenance, coordination of frequencies, interference, site construction, dispatch, interconnection, and governance. He said the 800 MHz system used at the Olympics employed 500 repeaters at 43 sites and ten venues, and that there were 15,600 radios in use during the games. In 17 days, there were 8,500,000 radio calls, averaging 500,000 every 24 hours, or about 5.7 per second. During the Paralympics, held about a month after the Olympics started, there were about 180,000 calls every 24-hour period, totaling 1,700,000 calls, and averaging two per second. He indicated that traffic loading and traffic management is critical because, on Opening Ceremonies Night, there were a significant number of busy signals on the system but, by managing the traffic, there were virtually no busies throughout the rest of the games. Mr. Proctor said, because of careful advance coordination with commercial carriers that began a year before the Olympics and continued with monthly meetings, this integrated public safety radio system operated without significant interference problems, even given the extremely high radio frequency levels from commercial radio systems, including Nextel, used at the event.

At the conclusion of his presentation, Mr. Proctor responded to questions from Mr. Wilhelm, Sgt. Stanley Sines, and Ted Dempsey.

Presentation by John Oblak. John Oblak, Chairman of the Private Radio Group of the Telecommunications Industries Association (“TIA”), was introduced by Mr. Wilhelm. Mr. Oblak gave a PowerPoint presentation regarding TIA’s progress in developing a wideband data standard for the 700 MHz wideband interoperability channels. Mr. Oblak reported that the working group has been meeting about every two weeks by telephone in addition to the five regular meetings that are held during the year, and good progress is being made towards the standards. He said the IOTA physical layer standard ballot is complete and there remain only two contenders for the interoperability standard, with each advancing a protocol and modulation scheme that would be incompatible with the other. He said there were two modulation types proposed for the physical layer: one is SAM, proposed by Motorola, and the other is IOTA, proposed by EADS DSM. He indicated it has been very difficult to choose one or the other based on technical reasons because both are very close in performance. Consequently, there are very few overriding technical reasons warranting the recommendation of one over the other. Further, while there are three levels of modulation, namely, low, medium, and high, and two identified physical layers,

resulting in 18 possible combinations, TIA, nevertheless, is proposing that there be only one bandwidth, one modulation type, and one modulation level. He said TIA's recommendation would be 50 kHz bandwidth for interoperability. He gave reasons for that recommendation and also recommended the mid-level constellation modulation. In summary, he said TIA anticipates finalizing its work on the interoperability standard and recommending one of the two contenders before expiration of the NCC's term in February, 2003.

At the conclusion of Mr. Oblak's presentation, Harlin McEwen thanked TIA and Mr. Oblak for the work being done and said it is a complicated issue. There were no questions posed to Mr. Oblak.

Subcommittee Reports. Next, Mr. Wilhelm indicated that the chairs of the subcommittees would present summaries of actions that took place the previous day and recommendations for Steering Committee action.

Interoperability Subcommittee. John Powell, Subcommittee Chair, reported that the Subcommittee recommended that the Steering Committee recommend to the Commission that standards be developed for equipment and procedures to be used on interoperability channels on the 800 MHz public safety band and on the public safety bands below 512 MHz. Included in that recommendation was placing these interoperability channels under the jurisdiction of State Interoperability Executive Committees ("SIECs") or, where no SIEC exists, in the hands of the relevant Regional Planning Committee. The federal interoperability channels are to be included in any plan developed, with the intent that there be a single agency per state that would serve as the licensee of such channels. Mr. Powell said there was discussion as to defining/establishing for the Technology Subcommittee the appropriate bandwidth and data rates for the wideband channels. In this regard, he expressed the Subcommittee's belief that most of the public safety community's activity would be within a 50 kHz bandwidth. Mr. Powell also forwarded to the Steering Committee the recommendation that the Chair write TIA, commending it for its work done to date on the development of a wideband data standard, and asking it to accelerate the remaining work so that the NCC could make a recommendation on the wideband data standard before the conclusion of the NCC's term in February of 2003.

At the conclusion of Mr. Powell's report, the Steering Committee agreed to make the development-of-standards equipment-&-procedures recommendation involving the 800 MHz public safety band and public safety bands below 512 MHz, to the Commission, as recommended and described by Mr. Powell, contingent on the proposal's being reduced to writing in a more complete form. The Steering Committee also authorized preparation of the letter to TIA, as recommended and described by Mr. Powell.

Technology Subcommittee. Glen Nash, Subcommittee Chair, indicated that there were discussions in the Technology Subcommittee meeting relating to the wideband data standard. He stated that the Subcommittee reached consensus on requesting Mr. Oblak and TIA to concentrate on the standard using the 50 kHz channel width operating at a mid-level symbol rate, with the specifics of that symbol rate being dependent on either the SAM- or IOTA-type modulation scheme. He also reported about the Subcommittee's consensus recommendation that the NCC recommend to the Commission that the rules be amended to include the Advanced Encryption Standard (AES) (ANSI/TIA/EIA-102.AAAD, Annex C – Advanced Encryption Standard) as the standard to be used when encryption is employed on the narrowband 700 MHz public safety band interoperability channels. This standard, currently being implemented by the federal government on its radio systems, replaces the earlier Digital Encryption Standard (DES) (TIA/EIA IS 102.AAAA-A Project 25 DES) currently specified in Section 90.553 of the Commission's Rules. Mr. Nash stated that this change is necessary because the DES standard has been compromised by hackers and to ensure interoperability with federal users when communications are conducted in the encrypted mode.

Mr. Nash also reported that the Subcommittee had discussed raising the design signal service level for public safety radio systems from the current and generally accepted 40 dBμ level to some level approximately 10 dB higher, thereby to alleviate interference. He reported that the Subcommittee was of a mixed mind about the efficacy of such an approach and that the matter had been referred to TIA for a recommendation that will be delivered before the next NCC meeting in September, 2002.

At the conclusion of Mr. Nash's report, Mr. Wilhelm asked Mr. Oblak if anything more were needed from the NCC for TIA to initiate its analysis. Mr. Oblak replied that nothing formal was needed but that a brief statement requesting the analysis to be performed would be helpful.

The Steering Committee then approved making the encryption-standard change recommendation to the Commission, as suggested by Mr. Nash.

Implementation Subcommittee. Ted Dempsey, Chair, reported on discussion that was held regarding the Region 5 Plan, submitted by Southern California, and said Dave Buchanan was asked various questions about the Region 5's plan. Mr. Dempsey also reported on discussion concerning NPSTC's agreeing to look into the role of the National Plan Oversight Committee. He said this matter was suggested by the Subcommittee in its previous year's report so that there would be some type of continuing committee to review and monitor the progress of the regional plans. He indicated that, hopefully, there would be a decision in September as to whether NPSTC would take on that assignment as a permanent task. He further stated that Tom Tolman's working group announced that additional funding of \$30,000.00 was secured for the rest of year 2002, to assist the Regional Planning Committees ("RPCs") in advertising and preparing their plans. He said there was discussion on channel loading terminology. He then presented the final version of the guidebook for use by the RPCs in developing their regional plans. He indicated he anticipates that the guidebook will be delivered to the RPCs at the same time the pre-coordination database becomes available for their use. Initially, 125 copies of the guidebook will be distributed to the Regional Plan chairs. It is in a loose-leaf format that will facilitate updating the document when necessary. Mr. Dempsey expressed the Subcommittee's hope that the guidebook would be valuable to Commission staff in evaluating the regional plans.

After Mr. Wilhelm noted that the Steering Committee previously had evaluated the document, the Steering Committee then approved, by consensus, authorization for publication of the revised version, with the understanding that the revisions would be primarily editorial in nature.

Richard DeMello. Mr. Wilhelm reported that Dick DeMello, NCC member, sent an e-mail saying he could not attend today's meeting due to radiation treatments. Mr. Wilhelm said Mr. DeMello is quite ill and suggested that he be kept in NCC members' thoughts and prayers.

Public Participation/Discussion. Dave Buchanan, County of San Bernardino, thanked Ted Dempsey and the Implementation Subcommittee for their guidelines, said they were very helpful in preparing Region 5's plan, and recommended the guidelines to all regions.

Robert Schlieman, New York State, commented that much has been made of interference between CMRS and public safety radio systems. After noting studies conducted by the Orange County, California, Sheriff's Department concerning intermodulation specifications for public safety radios, Mr. Schlieman concluded that, based on those studies, the "solution" is to reduce interference levels and not try to buy better receivers -- which are not available.

Ted Dempsey commented that the public safety community is willing to do what it can to make its equipment better. Yet, based on his work experience with the New York Police Department, when operating in the 470 MHz band, there was interference with Nextel equipment, and the

matter was quickly resolved. Thus, given the high RF environment in New York City and the increasing costs for a conventional analog portable radio due to the RF environment, he said he did not agree that the public safety community should have to make adjustments to its equipment to accommodate commercial providers.

Future NCC Meetings. Mr. Wilhelm pointed out that the next meetings are scheduled for September 19 (subcommittee meetings) and September 20 (General Membership meeting), in Washington, DC, at Commission headquarters. He said the Steering Committee had suggested additional meetings on November 21 and 22, in New York City, to coincide with the Radio Club of America's annual meeting. There being no objections, Mr. Wilhelm tentatively scheduled meetings on November 21 (subcommittee meetings) and November 22 (General Membership meeting) in New York City.

Continuation of NCC Work. Mr. Wilhelm encouraged NCC members to use the list servers to continue their work during the NCC's summer hiatus.

Close of Meeting. Mr. Wilhelm inquired if there were any other comments. There were none, and he thanked the attendees for their attendance at the meeting.

(Whereupon Mr. Wilhelm adjourned the meeting at approximately 10:45 a.m.)

Prepared by: Bert Weintraub
Attorney Advisor
Public Safety & Private Wireless Division
Wireless Telecommunications Bureau
Federal Communications Commission

Certified as to accuracy:

Michael Wilhelm

Date: _____

NCC ATTENDANCE ROSTER FOR May 31, 2002

<i>Last Name</i>	<i>First Name</i>	<i>Meeting Date</i>
Blake	Richard	May 31, 2002
Bohn	Richard	May 31, 2002
Buchanan	David	May 31, 2002
Coltri	Norman	May 31, 2002
Devine	Stephen	May 31, 2002
Edward J.	Dempsey	May 31, 2002
Eierman	David	May 31, 2002
Friend	Joseph	May 31, 2002
Funk	David	May 31, 2002
Greczyn	Mary	May 31, 2002
Griffin	Fred	May 31, 2002
Gurss	Robert	May 31, 2002
Hall	Wray	May 31, 2002
Hanna	Joe	May 31, 2002
Haraseth	Ron	May 31, 2002
Ittner	Al	May 31, 2002
Kearns	Kevin	May 31, 2002
Knight	Curt	May 31, 2002
Leland	Wayne	May 31, 2002

Monday, June 24, 2002

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<i>Last Name</i>	<i>First Name</i>	<i>Meeting Date</i>
Loewenstein	Timothy	May 31, 2002
Marshall	Melissa	May 31, 2002
Martinez	Maribel	May 31, 2002
McEwen	Harlin	May 31, 2002
McGahey	Gene	May 31, 2002
Nash	Glen	May 31, 2002
Oblak	John	May 31, 2002
Pickeral, J.D.	David	May 31, 2002
Powell	John	May 31, 2002
Proctor	Steven	May 31, 2002
Raheb	Kent	May 31, 2002
Rinehart	Bette	May 31, 2002
Roy	Adam	May 31, 2002
Schlieman	Robert F.	May 31, 2002
Sines	Sgt. Stanley A.	May 31, 2002
Smith	Raymond R.	May 31, 2002
Storey	Marvin	May 31, 2002
Tolman	Tom	May 31, 2002

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<i>Last Name</i>	<i>First Name</i>	<i>Meeting Date</i>
Ward	Marilyn	May 31, 2002
Zehner	Zachary	May 31, 2002

Total for Attendance Roster: 40